

1           1.       A portable image transfer system comprising:  
2               a digital still camera, at a remote station, which captures images in digital form  
3 and stores the images in a camera memory;  
4               a cellular telephone transmitter;  
5               a central processing unit (CPU) coupled to the camera memory and the cellular  
6 telephone transmitter, wherein the CPU controls the camera memory to cause it to output data  
7 representing an image and the CPU controls the cellular telephone transmitter to cause a cellular  
8 telephone to transmit the data output from the camera memory;  
9               a receiving station coupled to the cellular telephone transmitter by a cellular  
10 network to receive image data;  
11               means, at the receiving station, for image processing;  
12               means for resetting the camera memory to be reused for subsequent images once  
13 an image is transmitted to the receiving station;  
14               a return link for sending commands from the receiving station to the CPU,  
15 wherein the commands are directions for obtaining further images as needed by the means for  
16 image processing; and  
17               an image storage device coupled to the receiving station to store images received  
18 by the receiving station.

1           2.       The apparatus of claim 1, wherein the CPU interfaces to a camera memory  
2 of an existing digital still camera.

1           3.       The apparatus of claim 1, wherein the cellular telephone transmitter  
2 comprises:  
3               a standard cellular telephone; and  
4               a cellular modem.

1                   4.       The apparatus of claim 1, further comprising means for packaging images  
2 as electronic mail messages prior to transmission by the cellular telephone transmitter.

1                   5.       The apparatus of claim 1, further comprising means for handling a serial  
2 line interface protocol connection between the cellular telephone transmitter and the receiving  
3 station.

1                   6.       The apparatus of claim 1, further comprising means for encrypting image  
2 data prior to transmission by the cellular telephone transmitter.

1                   7.       (Amended) The apparatus of claim 1, further comprising a means for  
2 causing the digital still camera to capture images on a periodic basis, wherein the CPU is  
3 [progammed] programmed to periodically transmit an image to free the camera memory for  
4 accepting subsequent images.

1                   8.       The apparatus of claim 1, further comprising means for determining a  
2 location of the portable image transfer system and means for including a location indication with  
3 each image.

1                   9.       The apparatus of claim 1, wherein the commands represent user directions  
2 to be displayed at the remote station directing the user to capture additional images as needed by  
3 the means for image processing.

1                   10.      The apparatus of claim 1, wherein the commands are directions directed at  
2 the remote station directing the digital still camera or CPU to capture additional image data as  
3 needed by the means for image processing.

1                   11.      The apparatus of claim 1, further comprising a remote printing device for  
2 printing images processed by the receiving station.

1                   12.      The apparatus of claim 11, wherein the remote printing device is one of a  
2 facsimile machine, a digital copier or a printer.

1                   13.     The apparatus of claim 8, further comprising means, within the receiving  
2 station, for using the location indication as a variable when processing said each image.

1                   14.     A portable image transfer system comprising:  
2                   a digital still camera, at a remote station, which captures images in digital form  
3 and stores the images in a camera memory;  
4                   a cellular telephone transmitter;  
5                   a central processing unit (CPU) coupled to the camera memory and the cellular  
6 telephone transmitter, wherein the CPU controls the camera memory to cause it to output data  
7 representing an image and the CPU controls the cellular telephone transmitter to cause a cellular  
8 telephone to transmit the data output from the camera memory;  
9                   a receiving station coupled to the cellular telephone transmitter by a cellular  
10 network to receive image data;  
11                   means, at the receiving station, for image processing;  
12                   means for resetting the camera memory to be reused for subsequent images;  
13                   a return link for sending commands from the receiving station to the CPU,  
14 wherein the commands are directions for obtaining further images as needed by the means for  
15 image processing; and  
16                   an image storage device coupled to the receiving station to store images received  
17 by the receiving station.

1                   15.     The apparatus of claim 14, wherein the CPU is configured to format the  
2 images into electronic mail messages prior to transmission by the cellular telephone transmitter.

1                   16.     The apparatus of claim 14, further comprising a component to provide  
2 location information relating to the location of the portable image transfer system, the CPU being  
3 configured to include location information with each image.

1           17. A portable image transfer system comprising:  
2           a digital still camera, at a remote station, which captures one or more images in  
3           digital form and stores the images in a camera memory;  
4           a cellular telephone transmitter for communication with a receiving station, the  
5           receiving station having an image processor;  
6           a central processing unit (CPU); and  
7           a return link for receiving commands from the receiving station to the CPU to  
8           obtain further images as needed by the image processor,  
9           the CPU being coupled to the camera memory and the cellular telephone  
10          transmitter, the CPU being configured to control the camera memory to produce output data  
11          representing the images formatted as one or more electronic mail messages, the CPU further  
12          being configured to control the cellular telephone transmitter to transmit the output data from the  
13          camera memory to the receiving station.

1           18. The portable image transfer system of claim 17 wherein the one or more  
2           electronic mail messages is provided in MIME format.

1           19. The portable image transfer system of claim 17 further including means  
2           for connecting to the receiving station using a predetermined communication protocol.

1           20. The portable image transfer system of claim 17 wherein the CPU is further  
2           configured to connect to an external printing device via the cellular telephone transmitter.

1           21. A portable image transfer system comprising:  
2           a digital still camera, at a remote station, which captures one or more images in  
3           digital form and stores the images in a camera memory;  
4           a cellular telephone transmitter for communication with a receiving station, the  
5           receiving station having an image processor;  
6           circuitry to produce information relating to the location of the portable image  
7           transfer system;

8                   a central processing unit (CPU); and  
9                   a return link for receiving commands from the receiving station to the CPU to  
10 obtain further images as needed by the image processor,  
11                   the CPU being coupled to the camera memory, to the circuitry, and to the cellular  
12 telephone transmitter, the CPU being configured to control the camera memory to produce  
13 output data representing a combination of the images and the location information, the CPU  
14 further being configured to control the cellular telephone transmitter to transmit the output data  
15 from the camera memory to the receiving station.

1                   22. The portable image transfer system of claim 21 wherein the output data  
2 represent the images and the location information in an electronic mail message.

1                   23. The portable image transfer system of claim 21 further including means  
2 for connecting to the receiving station using a predetermined communication protocol.

1                   24. The portable image transfer system of claim 21 wherein the CPU is further  
2 configured to connect to an external printing device via the cellular telephone transmitter.

1                   25. A portable image transfer apparatus comprising:  
2                   a cellular telephone transmitter component;  
3                   an image capture component for producing digital images;  
4                   a memory operatively coupled to the image capture interface to receive and store  
5 one or more digital images;  
6                   a controller coupled to the memory and to the cellular telephone transmitter  
7 component, the controller configured to produce output data representing the images, the  
8 controller further configured to control the cellular telephone transmitter component to  
9 communicate with a receiving station to transmit the output data from the memory to the  
10 receiving station, the receiving station having image processing means; and  
11                   a return link for receiving commands from the receiving station,

12                   wherein the output data is transmitted to the receiving station when the receiving  
13 station transmits a first command to the portable image transfer apparatus to obtain further  
14 images needed by the image processing means.

1                   26.    The portable image transfer system of claim 25 wherein the image capture  
2 component is a digital camera.

1                   27.    The portable image transfer system of claim 25 wherein the image capture  
2 component is an interface to a digital camera.

1                   28.    The portable image transfer system of claim 25 wherein the controller is  
2 further configured to receive one or more images from the receiving station.

1                   29.    The portable image transfer system of claim 25 wherein the controller is  
2 further configured to communicate with the receiving station using a predetermined  
3 communication protocol.

1                   30.    The portable image transfer system of claim 25 wherein the controller is  
2 further configured to communicate with the receiving station to send the image over the Internet.

1                   31.    The portable image transfer system of claim 25, wherein the controller is  
2 further configured to format the images into one or more electronic mail messages prior to  
3 transmission by the cellular telephone transmitter.

1                   32.    The portable image transfer system of claim 31 wherein the one or more  
2 electronic mail messages is provided in MIME format.

1                   33.    The portable image transfer system of claim 25, wherein the cellular  
2 telephone transmitter comprises a standard cellular telephone and a cellular modem.

1                   34.    The portable image transfer system of claim 25, wherein the controller is  
2 further configured to encrypt image data prior to transmission by the cellular telephone  
3 transmitter.

1           35. The portable image transfer system of claim 25, wherein the controller is  
2 further configured to control the image capture device to periodically capture images and to  
3 periodically transmit image data to the receiving station.

1           36. A telecommunication system comprising:  
2           a communication component for receiving image data originating from a cellular  
3 telephone device;  
4           an image data store for storing the image data;  
5           a return link for sending commands to the cellular telephone device; and  
6           a controller coupled to the communication component and to the image data store,  
7 the controller configured to process the image data and to communicate the image data over the  
8 Internet to a receiving station, the receiving station having image processing means,  
9           wherein the image data is transmitted to the receiving station when the receiving  
10 station transmits a first command to the cellular telephone device to obtain further images needed  
11 by the image processing means.

1           37. A telecommunication system comprising:  
2           a communication component for receiving image data originating from a cellular  
3 telephone device;  
4           an image data store for storing the image data;  
5           a return link for sending commands to the cellular telephone device; and  
6           a controller coupled to the communication component and to the image data store,  
7 the controller configured to process the image data and to communicate the image data over the  
8 Internet to a receiving station,  
9           wherein the cellular telephone device is an image transfer apparatus as recited in  
10 claim 25,  
11           wherein the image data is transmitted to the receiving station when the receiving  
12 station transmits a first command to the cellular telephone device.

1           38. An image processing system comprising:  
2           a communication component for receiving image data originating from a cellular  
3           telephone device, the cellular telephone device comprising an image transfer apparatus as recited  
4           in claim 25;  
5           an image data store for storing the image data; and  
6           a controller coupled to the communication component and to the image data store,  
7           the controller configured to process the image data and to communicate the image data over the  
8           Internet.

1           39. The image processing system of claim 38 wherein the controller is further  
2           configured to transmit one or more images to the cellular telephone device.

1           40. An image processing system comprising:  
2           a communication component for receiving image data originating from a cellular  
3           telephone device, the cellular telephone device comprising an image transfer apparatus as recited  
4           in claim 27;  
5           an image data store for storing the image data; and  
6           a controller coupled to the communication component and to the image data store,  
7           the controller configured to process the image data and to communicate the image data over the  
8           Internet.

1           41. The apparatus of claim 1 wherein the return link is further for sending  
2           commands from the CPU to the receiving station.

1           42. The apparatus of claim 14 wherein the return link is further for sending  
2           commands from the CPU to the receiving station.

1           43. The portable image transfer system of claim 17 wherein the return link is  
2           further for sending commands from the CPU to the receiving station.

1           44. The portable image transfer system of claim 21 wherein the return link is  
2           further for sending commands from the CPU to the receiving station.



1           45. The portable image transfer system of claim 25 wherein the return link is  
2 further for sending commands to the receiving station.

1           46. The telecommunication system of claim 36 wherein the return link is  
2 further for sending commands from the cellular telephone device.

1           47. A portable image transfer system comprising:  
2 a digital still camera, at a remote station, which captures one or more images in  
3 digital form and stores the images in a camera memory;  
4 a cellular telephone transmitter for communication with a receiving station, the  
5 receiving station having means for image processing;  
6 a central processing unit (CPU); and  
7 a link for receiving data from the receiving station to the CPU,  
8 the CPU being coupled to the camera memory and the cellular telephone  
9 transmitter, the CPU being configured to control the camera memory to produce output data  
10 representing the images formatted as one or more electronic mail messages, the CPU further  
11 being configured to control the cellular telephone transmitter to transmit the output data from the  
12 camera memory to the receiving station,  
13 wherein the output data is transmitted to the receiving station when the receiving  
14 station transmits a first command to the portable image transfer system to obtain further images  
15 needed by the means for image processing.

1           48. The portable image transfer system of claim 47 wherein the one or more  
2 electronic mail messages is provided in MIME format.

1           49. The portable image transfer system of claim 47 further including means  
2 for connecting to the receiving station using a predetermined communication protocol.

1           50. The portable image transfer system of claim 47 wherein the CPU is further  
2 configured to connect to an external printing device via the cellular telephone transmitter.

1                   51. The portable image transfer system of claim 47 wherein the link is further  
2 for sending data from the CPU to the receiving station.

1                   52. A portable image transfer system comprising:  
2                   a digital still camera, at a remote station, which captures one or more images in  
3 digital form and stores the images in a camera memory;  
4                   a cellular telephone transmitter for communication with a receiving station, the  
5 receiving station having means for image processing;  
6                   circuitry to produce information relating to the location of the portable image  
7 transfer system;  
8                   a central processing unit (CPU); and  
9                   a link for receiving data from the receiving station to the CPU,  
10                  the CPU being coupled to the camera memory, to the circuitry, and to the cellular  
11 telephone transmitter, the CPU being configured to control the camera memory to produce  
12 output data representing a combination of the images and the location information, the CPU  
13 further being configured to control the cellular telephone transmitter to transmit the output data  
14 from the camera memory to the receiving station,  
15                  wherein the output data is transmitted to the receiving station when the receiving  
16 station transmits a first command to the portable image transfer apparatus to obtain further  
17 images needed by the means for image processing.

1                   53. The portable image transfer system of claim 52 wherein the output data  
2 represent the images and the location information in an electronic mail message.

1                   54. The portable image transfer system of claim 52 further including means  
2 for connecting to the receiving station using a predetermined communication protocol.

1                   55. The portable image transfer system of claim 52 wherein the CPU is further  
2 configured to connect to an external printing device via the cellular telephone transmitter.

1           56. The portable image transfer system of claim 52 wherein the link is further  
2 for sending data from the CPU to the receiving station.

1           57. A portable image transfer apparatus comprising:  
2 a cellular telephone transmitter component;  
3 an image capture component for producing digital images;  
4 a memory operatively coupled to the image capture interface to receive and store  
5 one or more digital images;  
6 a controller coupled to the memory and to the cellular telephone transmitter, the  
7 controller configured to produce output data representing the images, the controller further  
8 configured to control the cellular telephone transmitter to communicate with a receiving station  
9 to transmit the output data from the camera memory to the receiving station, the receiving station  
10 having an image processor; and  
11 a link for receiving data from the receiving station,  
12 wherein the output data is transmitted to the receiving station when the receiving  
13 station transmits a first command to the portable image transfer apparatus to obtain further  
14 images as needed by the image processor.

1           58. The portable image transfer system of claim 57 wherein the image capture  
2 component is a digital camera.

1           59. The portable image transfer system of claim 57 wherein the image capture  
2 component is an interface to a digital camera.

1           60. An image processing system comprising:  
2 a communication component for receiving image data originating from a cellular  
3 telephone device, the cellular telephone device comprising an image transfer apparatus as recited  
4 in claim 59;  
5 an image data store for storing the image data; and

6                   a controller coupled to the communication component and to the image data store,  
7 the controller configured to process the image data and to communicate the image data over the  
8 Internet.

1                   61.    The portable image transfer system of claim 57 wherein the controller is  
2 further configured to receive one or more images from the receiving station.

1                   62.    The portable image transfer system of claim 57 wherein the controller is  
2 further configured to communicate with the receiving station using a predetermined  
3 communication protocol.

1                   63.    The portable image transfer system of claim 57 wherein the controller is  
2 further configured to communicate with the receiving station to send the image over the Internet.

1                   64.    The portable image transfer system of claim 57 , wherein the controller is  
2 further configured to format the images into one or more electronic mail messages prior to  
3 transmission by the cellular telephone transmitter.

1                   65.    The portable image transfer system of claim 64 wherein the one or more  
2 electronic mail messages is provided in MIME format.

1                   66.    The portable image transfer system of claim 57, wherein the cellular  
2 telephone transmitter comprises:  
3                   a standard cellular telephone; and  
4                   a cellular modem.

1                   67.    The portable image transfer system of claim 57, wherein the controller is  
2 further configured to encrypt image data prior to transmission by the cellular telephone  
3 transmitter.

1                   68. The portable image transfer system of claim 57, wherein the controller is  
2 further configured to control the image capture device to periodically capture images and to  
3 periodically transmit image data to the receiving station.

1                   69. An image processing system comprising:  
2                   a communication component for receiving image data originating from a cellular  
3 telephone device, the cellular telephone device comprising an image transfer apparatus as recited  
4 in claim 57;  
5                   an image data store for storing the image data; and  
6                   a controller coupled to the communication component and to the image data store,  
7 the controller configured to process the image data and to communicate the image data over the  
8 Internet.

1                   70. The image processing system of claim 69 wherein the controller is further  
2 configured to transmit one or more images to the cellular telephone device.

1                   71. The image processing system of claim 57 wherein the link is further for  
2 sending data to the receiving station.

1                   72. The image processing system of claim 57 wherein the link is further for  
2 sending data from the CPU to the receiving station.